

Taxonomic Notes on *Silene keiskei* (Caryophyllaceae)

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Two infraspecific taxa of *Silene keiskei* Miq. are treated: *S. keiskei* var. *akaisialpina* is recognized as a distinct species, *Silene akaisialpina* (Yamazaki) H. Ohashi, Tateishi & H. Nakai, and a white flowered form of *Silene keiskei* Miq. is regarded as *S. keiskei* f. *albescens* (Takeda) H. Ohashi, Tateishi & H. Nakai.

1) *Silene keiskei* var. *akaisialpina* (Yamazaki) Ohwi & H. Ohashi

Silene keiskei var. *akaisialpina* was described by Yamazaki (1955) as a variety of *Melandryum keiskei*. It was distinguished from other varieties of the species, var. *keiskei* and var. *minus*, especially in color and size of the flowers together with differences in habit, shape of leaves, number of flowers on one inflorescence, and shape of calyx-lobes. Also, differences of distribution and habitat between var. *akaisialpinum* and the other two were shown in his paper. Var. *akaisialpinum* has been adopted in succeeding Floras in Japan (Ohwi 1965a, 1965b, Kitagawa 1982, Shimizu 1983, etc.), although the name was changed into *Silene* under the transfer of *Melandryum keiskei* to *Silene keiskei* (Ohwi and Ohashi 1974). When describing, however, Yamazaki noted that var. *akaisialpinum* is morphologically similar to var. *keiskei* through var. *minus*, although it may be seen as a distinct species from *Melandryum keiskei* (on page 93). He did not indicate what characters show such similarity among these varieties. No taxonomic revisions for these taxa have been done.

So far as we have examined, *Silene keiskei* var. *akaisialpina* is clearly different from the

other two varieties of the species. Probably, Yamazaki (1955) considered a variation range of the flower size in var. *akaisialpina* is overlapping with that of var. *keiskei*. However, a wide range of variation in flower size is due to dimorphism in flowers of *Silene keiskei*, as shown in the key to the species below. Therefore, we regard this variety as a distinct species from *S. keiskei*. The differences are shown in the following key:

1. Inflorescences 1(–2)-flowered; flowers pale reddish purple, about 3–4 cm across; petals auriculate at top of claw, 35–38 mm long in hermaphrodite flowers and 24–28 mm long in female flowers; filaments with dense long hairs below the half; erect plants, 10–20 cm tall *S. akaisialpina*
1. Inflorescences cymose, 3–4-flowered; flowers reddish purple, about 2–3 cm across; petals without auricles at top of claw, 24–30 mm long in hermaphrodite flowers and 18–23 mm long in female flowers; filaments glabrous or sparsely short-hairy; erect or decumbent plants, 10–60 cm tall *S. keiskei*

Silene akaisialpina (Yamazaki) H. Ohashi, Tateishi & H. Nakai, stat. nov.

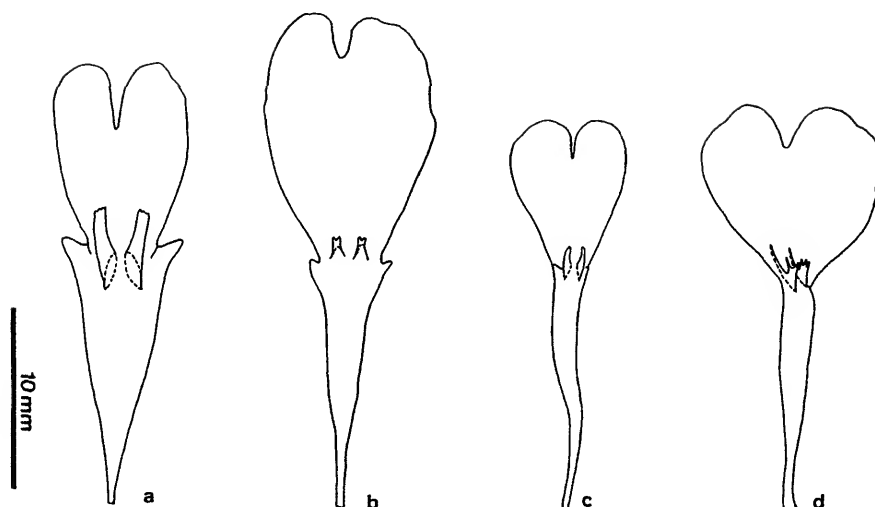


Fig. 1. Petals of *Silene akaisialpina* (a–b) and *S. keiskei* (c. var. *minor*; d. var. *keikei*). a: Iketani 1650 (TUS), ♀ flower; b: Murata 12050 (KYO), ♀ flower; c: Sugaya (TUS 29407), hermaphrodite flower (cf. basal part omitted), d: Ikeda (TUS 118879) ♀ flower.

Melandryum keiskei var. *akaisialpinum* Yamazaki in J. Jap. Bot. **30**: 94 (1955); Ohwi, Fl. Jap. Engl. ed. 434 (1965), & op. cit. rev. ed. 586–587 (1965).

S. keiskei var. *akaisialpina* (Yamazaki) Ohwi & H. Ohashi in J. Jap. Bot. **49**: 345 (1974); Kitagawa in Satake et al., Wild Flow. Jap. Herb. **2**: 44 (1982); T. Shimizu, New Alp. Pl. Jap. **2**: 93, fig. 302 (1983); Ohwi & Kitagawa, New Fl. Jap. rev. ed. 668 (1992).

Distribution: Japan. Central Honshu. Shizuoka, Yamanashi and Nagano Prefs.: in Akaishi Mountain Range.

f. *akaisialpina* タカネビランジ (Yamazaki 1955).

f. *leucantha* (Takeda) H. Ohashi, Tateishi & H. Nakai, comb. nov. シロバナタカネビランジ

S. keiskei f. *minor* lus *leucantha* Takeda in Not. Roy. Bot. Gard. Edinb. **8**: 236 (1915).

Melandryum keiskei var. *akaisialpinum* f. *leucanthum* (Takeda) Yamazaki in J. Jap. Bot. **30**: 94 (1955).

S. keiskei var. *akaisialpina* f. *leucantha* (Takeda) Ohwi & H. Ohashi in J. Jap. Bot. **49**:

345 (1974).

Specimens examined.

[*Silene akaisialpina*] Yamanashi Pref.: Mts. Hōou-zan, Mt. Jizo-dake, alt. 2700 m. T. Yamazaki s. n., 7 Sept. 1954 (TI-holotype, isotypes); I. c., Sainokawara, alt. 2700 m. T. Yamazaki s. n., 7 Sept. 1954 (TI); I. c., between Hirogawara Pass and Mt. Kannon-dake, alt. 2750 m. G. Murata 12050 (KYO). Shizuoka Pref.: Mt. Senmai, alt. ca. 2875 m. H. Iketani 1650 (TUS).

[*Silene keiskei* var. *keiskei*] Gunma Pref.: Mt. Arafune-yama, T. Ikeda 12 Aug. 1985 (TUS). Nagano Pref.: cult. at Saku (origin from Mt. Arafune-yama). T. Ikeda 4 Aug. 1986 (TUS 118879).

[*Silene keiskei* var. *minor*] Nagano Pref.: Mt. Meshimori-yama, alt. 1500–1600 m, T. Ikeda 11 Aug. 1983 (TUS); cult. at Saku (origin from Mt. Meshimori-yama). T. Ikeda 4 Aug. 1986 (TUS 118878). Tochigi Pref.: Kuriyama. S. Sugaya 8 June 1935 (TUS 29407), Kuriyama. S. Sugaya 8 June 1935 (TUS 29409).

2) *Silene keiskei* f. *minor* subf. *albescens* Takeda

Ohwi and Ohashi (1974) treated a white flowered form of *Silene keiskei* as f. *albescens* Takeda. However, the form was recognized originally by Takeda at the rank of subform. Accordingly, *S. keiskei* f. *albescens* remains not validly published. We treat this form at the rank of form of *S. keiskei*.

Silene keiskei Miquel: Kitagawa in Satake

et al., Wild Flow. Jap. Herb. 2: 44 (1982); Ohwi & Kitagawa, New Fl. Jap. rev. ed. 668 (1992).

var. **minor** (Takeda) Ohwi & H. Ohashi in J. Jap. Bot. 49: 344 (1974).

f. **minor** ビランジ

f. **albescens** (Takeda) H. Ohashi, Tateishi & H. Nakai, stat. nov. シロバナビランジ

Silene keiskei f. *minor* subf. *albescens* Takeda in Bot. Mag. Tokyo 24: 63 (1910).

Melandryum keiskei f. *albescens* (Takeda) Honda, Nom. Pl. Jap. 510 (1939).

Silene keiskei f. *albescens* Takeda; Ohwi &

H. Ohashi in J. Jap. Bot. 49: 345 (1974), nom. illeg.

References

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- 1965b. Flora of Japan. Revised ed. Shibundo, Tokyo (in Japanese).
- and Ohashi H. 1974. New combinations in Japanese and Formosan *Silene* (Caryophyllaceae). J. Jap. Bot. 49: 344–345 (in Japanese).
- Yamazaki T. 1955. On *Melandryum keiskei* (Miquel) Ohwi. J. Jap. Bot. 30: 93–94 (in Japanese).

大橋広好^a, 立石庸一^b, 中井秀樹^a: ビランジとタカネビランジ

Silene keiskei ビランジと *Silene akaisialpina* タカネビランジとを別種として区別した。両種の花弁は本文の検索表と Fig.1 に示したように、爪部の頂端にタカネビランジでは耳状の突起がみられるが^a, ビランジにはこれがない。両種とも舷部基部から爪部への移行部の内面には小さな突起がみられるが^a, その突起とは異なるものである。さらに、ビランジでは両性花の花弁は長さが 24–30mm, 雌花では 18–23mm であるが、タカネビランジでは花弁の長さは両性花で 35–38mm, 雌花で 24–28mm である。また、タカネビランジの花糸には

中部以下に密毛があるが、ビランジにはないかあるいは花弁と対生する花糸に僅かにみられる程度である。次に、タカネビランジの学名の変更に伴いシロバナタカネビランジの学名も変更した。また、シロバナビランジは亜品種のランクで発表されたものであったが、品種で発表されたものと間違えられていたので、品種としての正しい組合せに訂正した。ビランジの標本を TUS に寄贈してくださった長野県佐久市の池田登志男氏にお礼申し上げます。

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